

10/510592

Docket No.: 58799(71699)

AMENDMENTS TO THE CLAIMSRECEIVED
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1-15. (Canceled)

16. (Currently Amended) A method of killing a cell that is sensitive to DT-A or PEA, comprising infecting the cell with an adenovirus produced by a packaging cell line, wherein the adenovirus comprises an adenoviral vector comprising a promoter operably linked to a nucleic acid encoding the A subunit of diphtheria toxin (DT-A) or Pseudomonas Exotoxin A (PEA), and wherein the cell line is capable of producing adenovirus that expresses the A subunit of diphtheria toxin (DT-A) or Pseudomonas Exotoxin A (PEA), wherein the cell line does not produce replication-competent adenovirus when used in conjunction with non-overlapping E1-deleted adenovirus, wherein the cell line is resistant to DTA and PEA and wherein the cell line has a mutated human EF-2 gene that encodes an EF-2 protein that is mutated at codon 705.

17. (Original) The method of claim 16, wherein the cell is a cancer cell.

18. (Canceled)

19. (Currently Amended) A method of selectively killing a cell in a subject, comprising administering a therapeutically effective amount of an adenovirus to the subject wherein the adenovirus is produced by a packaging cell line, wherein the adenovirus comprises an adenoviral vector comprising a promoter operably linked to a nucleic acid encoding the A subunit of diphtheria toxin (DT-A) or Pseudomonas Exotoxin A (PEA), and wherein the cell line is capable of producing adenovirus that expresses the A subunit of diphtheria toxin (DT-A) or Pseudomonas Exotoxin A (PEA), and wherein the cell line does not produce replication-competent adenovirus when used in conjunction with non-overlapping E1-deleted adenovirus, wherein the cell line has a mutated human EF-2 gene that encodes an EF-2 protein that is mutated at codon 705, wherein the adenovirus comprises a tissue-specific promoter or enhancer that controls the expression of the DT-A or PEA wherein the tissue-specific promoter or enhancer is active only in the cell and not in other cells, thereby killing the cell but not other cells.

20. (Original) The method of claim 19, wherein the cell is a cancer cell.

21. (Canceled)

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22. (Currently Amended) A method of treating a subject suffering from cancer comprising administering a therapeutically effective amount of the adenovirus to the subject, wherein the adenovirus is produced by a packaging cell line, wherein the adenovirus comprises an adenoviral vector comprising a promoter operably linked to a nucleic acid encoding the A subunit of diphtheria toxin (DT-A) or Pseudomonas Exotoxin A (PEA), and wherein the cell line is capable of producing adenovirus that expresses the A subunit of diphtheria toxin (DT-A) or Pseudomonas Exotoxin A (PEA), and wherein the cell line does not produce replication-competent adenovirus when used in conjunction with non-overlapping E1-deleted adenovirus, wherein the cell line has a mutated human EF-2 gene that encodes an EF-2 protein that is mutated at codon 705, and wherein the cell line is resistant to DTA and PEA thereby treating said cancer.

23.-33. (Canceled)

34. (Previously Presented) The method of any one of claims 16, 19, or 22, wherein the glycine residue at codon 705 of the EF-2 protein is mutated to arginine.

35. (Previously Presented) The method of claim 16, wherein the packaging cell lines are resistant to about 10^{-9} M diphtheria toxin.

36. (Previously Presented) The method of claim 16, wherein the packaging cell lines contain the adenovirus E1 region.

37. (Previously Presented) The method of claim 16, wherein the packaging cell lines contain the adenovirus serotype 5 (Ad5) E1-A and E1-B encoding sequences.

38. (Previously Presented) The method of claim 16, wherein the packaging cell lines are derived from PER.C6 cells.